

ABSTRACT OF THE DISCLOSURE

A small, substantially spherical, free-flying utility platform for use in space can be docked, inspected and serviced in an apparatus including a container with a chamber therein mounted on the outside of a space vehicle or space station. A motorized closing mechanism drives a door to selectively open or close an opening of the container into the chamber, and another mechanism automatically latches and locks the door. The door operations can be automatically triggered as the platform breaks the beams of light beam devices arranged in the container. The proper positioning of the platform in the container can be detected by a photoelectric switch. Capture and docking of the platform is facilitated by sloping funnel-shaped interior walls of the container, and properly shaped cushions and/or a docking cradle. When docked, the platform has its batteries recharged, its fuel tank refueled, and its electronics evaluated and diagnosed.